

WORK ORDER 2009-11

Date opened: 8 June 2009

Project: Quick Release Mounting Provisions
Type: McDonnell Douglas MD600N

Batch Quantity: 5 sets of Mounting Provisions

Approval: SH09-1
Drawing List: DCL828-12

<u>Fabrication and Assembly Drawing(s)</u>	<u>Description</u>
82815, Rev. 0	Down Tube Assembly
82830, Rev. 0	Cargo Hook Pad
82831, Rev. 0	Strut Assemblies
82832, Rev. 0	Down Tube Fabrication

Complete material tracking information on attached pages.

Work Order pre-completion Inspection:

Project is on Approval Limitation Record:	<u>Y</u> ✓
Document Control List revision level matches (or exceeds) STC:	<u>Y</u> ✓
Drawings revision levels match Document Control List:	<u>Y</u> ✓
Purchase order or Work order source is recorded for each part/ass'y:	<u>Y</u> ✓
Tests and inspections specifically called out on drawings are complete:	<u>Y</u> ✓
Release tags associated with all fabricated parts are attached:	<u>Y</u>
All mounting hardware and supplies are included:	<u>Y</u>

List all non-conformities raised: _____

Welder Signature: _____ Date: _____

Inspector Signature: _____ Date: _____

Drawing: 82815 Revision 0
 Assembly: 82815-01 Down Tube Ass'y

Qty Per	Part #	Description	Material	P.O./W.O.	Checked
10 Total	82815-01	Down Tube Assembly			
1	82832-01	Down Tube	Below		
2	69830-21	Stop	6061-T6 Aluminum, 5/8 Rod	8049	
1	69830-22	Knob	6061-T6 Aluminum, 3/4 Rod	3005	
1	82815-05	Knob	6061-T6 Aluminum, 1.25 Rod	9001	
2	69830-23	Spring		9091	
2	#10-32	Screw	Stainless Steel	9053	
2	MS21044C3	Nut		9056	
1	AN45-7A	Eye Bolt		9036	
1	AN960-516	Washer		9022	
1	MS21044N5	Nut		7077	

Processes	Per	Mat'ls Used	Inspection	Signature
Final Inspection	Drawing 82815			

Tag incomplete parts with Work Order # when stored between processes.

Tag complete parts / assemblies with Release Tag prior to storage.

Drawing: 82830, Revision 0; 82831, Revision 0

Assembly: 82830-01 Cargo Hook Pad; 82831-01 Forward Strut Assembly; 82831-02 Aft Strut Assembly

Qty Per	Part #	Description	Material	P.O./W.O.	Checked
5 Total	82830-01	Cargo Hook Pad	6061-T6 Aluminum, 1.5 x 2.5 Bar	6047	
2	AN45-7A	Eye Bolt		9036	
2	AN960-516	Washer		9022	
2	MS21044N5	Nut		7077	
5 Total	82831-01	Forward Strut Assembly			
1	82831-03	Tube	4130 Steel, 5/8 x 0.035 Rnd. Tube	9506142	
2	AN490HT10P	Rod End		9036	
2	AN665-46R	Threaded Rod End		9036	
2	AN316-5R	Check Nut		9039	
5 Total	82831-02	Aft Strut Assembly			
1	82831-03	Tube	4130 Steel, 5/8 x 0.035 Rnd. Tube	9506142	
2	AN490HT10P	Rod End		9036	
2	AN665-46R	Threaded Rod End		9036	
2	AN316-5R	Check Nut		9039	

Processes	Per	Mat'ls Used	Inspection	Signature
Welding	AMS 2685C	Welding Rod ER70S-2		
Powder Coat	Drawing 82831			
Final Inspection	Drawing 82830, 82831			

Tag incomplete parts with Work Order # when stored between processes.

Tag complete parts / assemblies with Release Tag prior to storage.

Drawing: 82832 Revision 0
 Assembly: 82832-01 Down Tube

Qty Per	Part #	Description	Material	P.O.W.O.	Checked
10 Total	82832-01	Down Tube			
1	82832-02	Tube	304 Stainless Steel, 1 x 2 x 0.12 Tube	8098	
1	82832-03	Pin	304 Stainless Steel, 3/4 Rod	9059	
1	82832-04	Spacer	304 Stainless Steel, 3/4 Rod	9059	
2	69830-07	Block	304 Stainless Steel, 3/8 x 3/4 Rod	9091	
1	69830-19	Cap	321 Stainless Steel, 0.025 Sheet	7006	
2	69830-11	Guide	304 Stainless Steel, 3/4 x 0.065 Tube	9011	

Processes	Per	Mat'ls Used	Inspection	Signature
Welding	AMS 2685C	Welding Rod ER308L		
Final Inspection	Drawing 82832			

Tag incomplete parts with Work Order # when stored between processes.

Tag complete parts / assemblies with Release Tag prior to storage.

Original view
AERO Design Ltd.
2013 - 39th Ave. NE
Calgary, AB, T2E 6R7

AUTHORIZED RELEASE CERTIFICATE

TRANSPORT CANADA
TCCA 24-0078
AMF # 73-04

Product: Beam Assembly Part #: 82815-01

Approval #: SH09-1 Serial #: --

WO #: 2009-11 Quantity: 2

Eligibility: McDonnell Douglas MD600N Work Status: Manufactured

Remarks: _____

I hereby certify that the product identified above has been manufactured in accordance with the applicable design data and the Canadian Aviation Regulations or applicable foreign regulations.

July 8/09
Date

[Signature]
Inspector's Signature

AERO Design Ltd.
2013 - 39th Ave. NE
Calgary, AB, T2E 6R7

AUTHORIZED RELEASE CERTIFICATE

TRANSPORT CANADA
TCCA 24-0078
AMF # 73-04

Product: Cargo Hook Pad Part #: 82830-01

Approval #: SH09-1 Serial #: --

WO #: 2009-11 Quantity: 1

Eligibility: McDonnell Douglas MD600N Work Status: Manufactured

Remarks: _____

I hereby certify that the product identified above has been manufactured in accordance with the applicable design data and the Canadian Aviation Regulations or applicable foreign regulations.

July 8/09
Date

[Signature]
Inspector's Signature

AERO Design Ltd.
2013 - 39th Ave. NE
Calgary, AB, T2E 6R7

AUTHORIZED RELEASE CERTIFICATE

TRANSPORT CANADA
TCCA 24-0078
AMF # 73-04

Product: Forward Strut Part #: 82831-01

Approval #: SH09-1 Serial #: --

WO #: 2009-11 Quantity: 1

Eligibility: McDonnell Douglas MD600N Work Status: Manufactured

Remarks: _____

I hereby certify that the product identified above has been manufactured in accordance with the applicable design data and the Canadian Aviation Regulations or applicable foreign regulations.

July 8/09
Date

[Signature]
Inspector's Signature

AERO Design Ltd.
2013 - 39th Ave. NE
Calgary, AB, T2E 6R7

AUTHORIZED RELEASE CERTIFICATE

TRANSPORT CANADA
TCCA 24-0078
AMF # 73-04

Product: Aft Strut Part #: 82831-02

Approval #: SH09-1 Serial #: --

WO #: 2009-11 Quantity: 1

Eligibility: McDonnell Douglas MD600N Work Status: Manufactured

Remarks: _____

I hereby certify that the product identified above has been manufactured in accordance with the applicable design data and the Canadian Aviation Regulations or applicable foreign regulations.

July 8/09
Date

[Signature]
Inspector's Signature

1. Approving Civil Aviation Authority/Country Transport Canada		2. AUTHORIZED RELEASE CERTIFICATE FORM ONE			3. Form Tracking No. 2016-0017
4. Organization Name and Address AERO Design Ltd. – 9888A Malaspina Road, Powell River, BC, V8A 0G3					5. Work Order/Contract/Invoice WO 2009-11
6. Item	7. Description	8. Part Number	9. Qty.	10. Serial/Batch No.	11. Status/Work
1.	Beam Assembly	82815-01	2	N/A	New
2.	Cargo Hook Pad	82830-01	1		
3.	Forward Strut	82831-01	1		
4.	Aft Strut	82831-02	1		
12. Remarks					
13a. Certifies that the items identified above were manufactured in conformity to: <input checked="" type="checkbox"/> Approved design data and are in condition for safe operation. <input type="checkbox"/> Non approved design data specified in block 12.			14a. <input type="checkbox"/> CAR 571.10 Maintenance Release <input type="checkbox"/> Other regulation specified in block 12 Certifies that unless otherwise specified in block 12, the work identified in block 11 and described in block 12, has been performed in compliance with the Canadian Aviation Regulations.		
13b. Signature <i>Jeff Clarke AD02</i>		13c. Approved Organization Number AMF 73-04		14b. Signature	
13d. Name Jeff Clarke - AD02		13e. Date (dd/mmm/yyyy) 14 April 2016		14c. Approved Organization Number	
				14d. Name	
				14e. Date (dd/mmm/yyyy)	
<p align="center">Installer Responsibilities</p> <p>This certificate does not constitute authority to install.</p> <p>Installers working in accordance with the national regulations of a country other than that specified in block 1 must ensure that their regulations recognize certifications from the country specified.</p> <p>Statements in blocks 13a or 14a do not constitute installation certification. In all cases, the technical record for the aircraft must contain an installation certification issued in accordance with the applicable national regulations before the aircraft may be flown.</p>					

IMS

2nd 15 APR 2016



Aero Design

Parts Distribution Sheet

Description: Beam MD 600

WO# 2009-11

[illegible]



Aero Design Ltd.

9888 A Malaspina Rd., Powell River, BC
V8A 0G3, 604-483-AERO (2376)



Quantity:

1

PN:

82831-01

Aircraft:

MD

Model: 600N

Description:

Forward Strut

Supplier:

N/A

Color:

White

WO#:

2009-11

PO# N/A



Aero Design Ltd.

9888 A Malaspina Rd., Powell River, BC
V8A 0G3, 604-483-AERO (2376)



Quantity:

1

PN:

82831-02

Aircraft:

MD

Model: 600N

Description:

Aft Strut

Supplier:

N/A

Color:

White

WO#:

2009-11

PO# N/A



Aero Design Ltd.

9888 A Malaspina Rd., Powell River, BC
V8A 0G3, 604-483-AERO (2376)

Quantity:

1

PN:

82830-01

Aircraft:

MD

Description:

Cargo Hook PAD

Supplier:

Aero Design

Color:

White

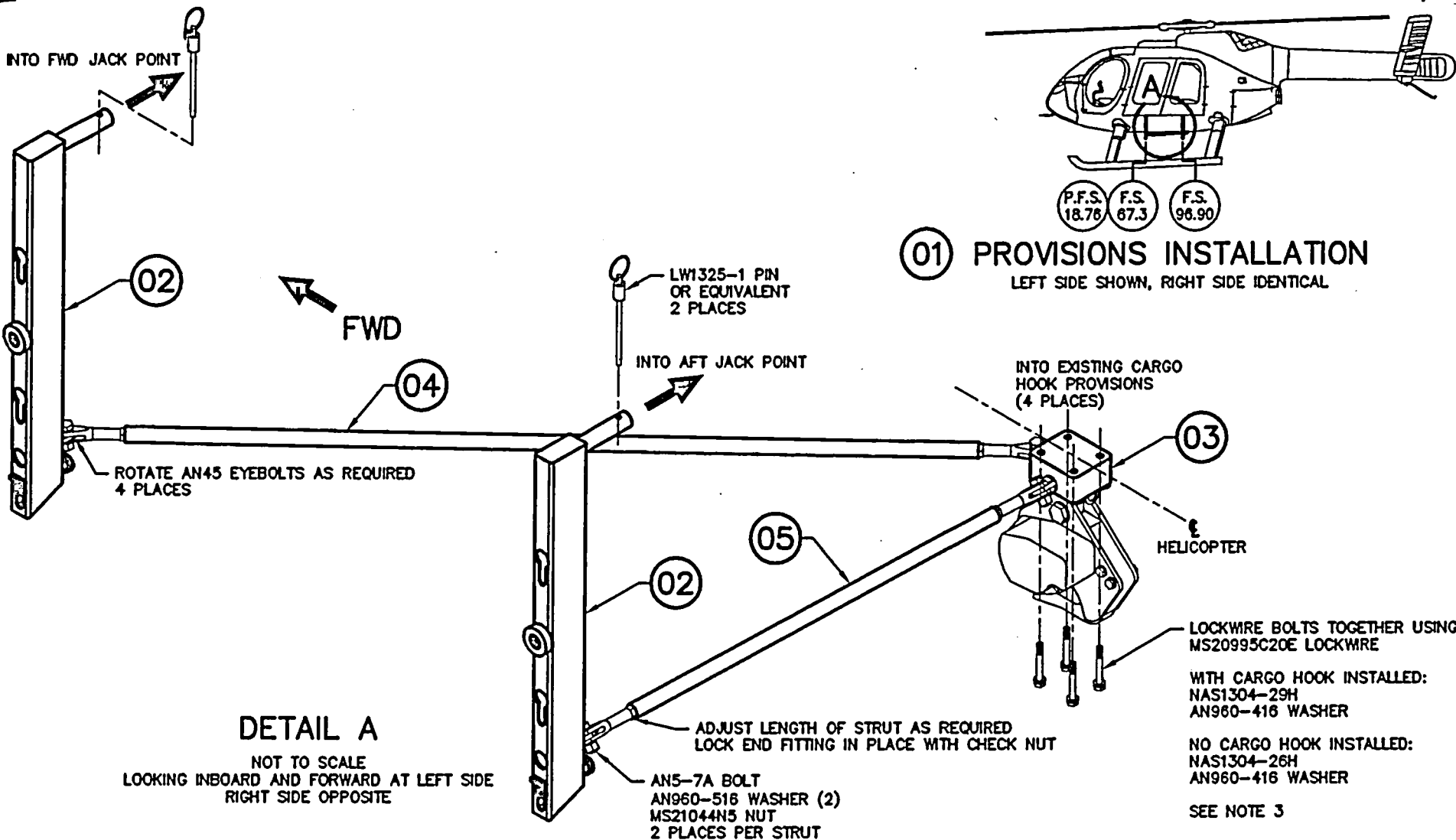
WO#:

2009-11

Model: 600

PO# N/A





APPROVALS		DATE		<div>AERO DESIGN LTD.</div> <div>CONSULTING ENGINEERS, TRANSPORT CANADA APPROVALS, DAR 290M</div> <div>2013 - 39TH AVENUE N.E., CALGARY, ALBERTA, CANADA, T2E 6R7</div> <div>tel: (403) 250-8027 fax: (403) 250-8333 www.aerodesign.ca</div>					
DRAWN: JEFF CLARKE		17 NOV 2008							
CHECKED: E. BURGOIN									
<div>UNLESS OTHERWISE SPECIFIED</div> <div>DIMENSIONS ARE IN INCHES.</div> <div>TOLERANCES ON:</div> <div>DECIMALS ANGLES</div> <div>X.XXX ±0.010 ±1/2"</div> <div>X.XX ±0.03</div> <div>X.X ±0.1</div>				<div>MCDONNELL DOUGLAS MD600N</div> <div>QUICK RELEASE PROVISIONS</div> <div>INSTALLATION</div>					
				NOT TO SCALE		DWG. SIZE	DWG. NO.	REV.	
				SHEET 1 OF 2		A4	82802	0	

REV.	DESCRIPTION OF CHANGE	INITIALS	DATE
0	*	*	*

NOTES

1. INSTALLATION MAY BE APPLIED TO THE LEFT OR RIGHT SIDE. LATERAL ARM IS POSITIVE ON RIGHT SIDE INSTALLATION.
2. THIS INSTALLATION IS COMPATIBLE WITH THE 3000 LB. CARGO HOOK INSTALLATION (P/N 369H90072-525)
3. ENSURE FULL ENGAGEMENT OF NAS1304 BOLTS. BOLT LENGTH MAY BE INCREASED IF REQUIRED. NAS6604 BOLTS MAY BE USED AS ALTERNATE IF REQUIRED.
4. INSTALL ALL HARDWARE USING STANDARD SHOP PRACTICES AS OUTLINED IN AC43.13-1B, CHAPTER 7 "AIRCRAFT HARDWARE, CONTROL CABLES, AND TURNBUCKLES" OR STANDARD AIRCRAFT WORKERS MANUAL, SECTION 7 "SHOP PRACTICES".
5. TORQUE 5/16" BOLTS TO 60-85 INCH-POUNDS.
TORQUE 1/4" BOLTS TO 30-40 INCH-POUNDS.

WEIGHT AND BALANCE						
ITEM	DESCRIPTION	WEIGHT (LB)	LONGITUDINAL		LATERAL	
			ARM (IN)	MOMENT (LB-IN)	ARM (IN)	MOMENT (LB-IN)
01	QUICK RELEASE PROVISIONS	11.2	85.6	958.7	-20.5	-229.6
2	LW1325-1		PIN			
A/R	MS20995C20E		LOCKWIRE			
A/R	AN960-416		WASHER			
4	NAS1304-26H		BOLT (ALTERNATE - NO HOOK)			
4	NAS1304-29H		BOLT			
1	MS21044N5		NUT			
1	AN960-516		WASHER			
4	AN5-7A		BOLT			
1	82831-02	05	AFT STRUT			
1	82831-01	04	FORWARD STRUT			
1	82830-01	03	CARGO HOOK PAD			
2	82815-01	02	BEAM ASSEMBLY			
	82802-01	01	QUICK RELEASE PROVISIONS INSTALLATION			
01	PART NO.	ITEM	DESCRIPTION			
QTY	LIST OF MATERIALS					

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	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ON: DECIMALS ANGLES X.XXX ±0.010 ±1/2" X.XX ±0.03 X.X ±0.1				MCDONNELL DOUGLAS MD600N QUICK RELEASE PROVISIONS INSTALLATION			
	NOT TO SCALE		DWG. SIZE A4		DWG. NO. 82802		REV. 0	
	SHEET 2 OF 2							